

CLAIMS

1. A DNA encoding a protein having the amino acid
sequence shown in SEQ ID NO: 1² or a variant protein thereof in which
one or more amino acid residues are substituted, deleted or added, said
protein and variant protein thereof being capable of yielding, through its
intracellular decomposition, peptide fragment(s) which can bind to major
histocompatibility complex (MHC) class I antigen and which can be
recognized by T cells in such binding state.

2. A DNA which comprises the base sequence shown in SEQ
ID NO: 2¹ or a variant DNA which hybridizes to said DNA under
stringent conditions, the protein produced by expression of said DNA
and variant DNA being capable of yielding, through its intracellular
decomposition, peptide fragment(s) which can bind to MHC class I
antigen and which can be recognized by T cells in such binding state.

3. A ^{low molecular weight} medicine comprising DNA of claim 1 or 2 as an active
ingredient.

4. An expression plasmid comprising DNA of claim 1 or 2.

5. A transformant transformed with the expression plasmid
of claim 4.

6. A tumor antigen protein produced by expression of DNA
of claim 1 or 2.

7. A tumor antigen peptide comprising part of the protein of
claim 6, which can bind to MHC class I antigen to be recognized by T
cells, or a derivative thereof having functionally equivalent properties.

8. A tumor antigen peptide of claim 7 which comprises all or

part of the amino acid sequence of positions 749-757, 736-744, 785-793, or 690-698 in the amino acid sequence of SEQ ID NO: 1, or a derivative thereof having functionally equivalent properties.

9. A medicine comprising, as an active ingredient, the tumor antigen protein of claim 6, ~~the tumor antigen peptide or derivative thereof defined in claim 7 or 8.~~

10. An antibody which specifically binds to the tumor antigen protein of claim 6 ~~or the tumor antigen peptide of claim 7 or 8.~~

11. A DNA comprising 8 or more bases having a sequence complementary to a coding or 5' non-coding sequence of DNA having the base sequence shown in SEQ ID NO: 2, an RNA corresponding to said DNA, or a chemically modified variant thereof.